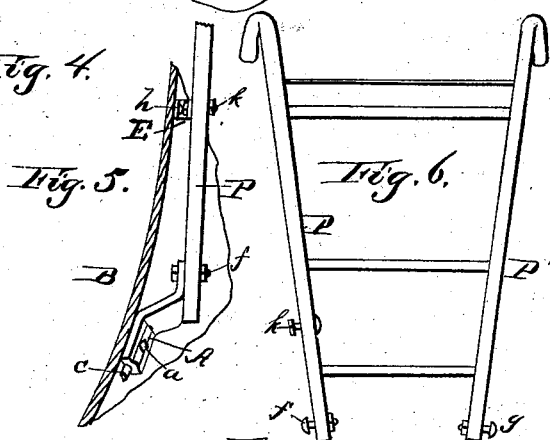
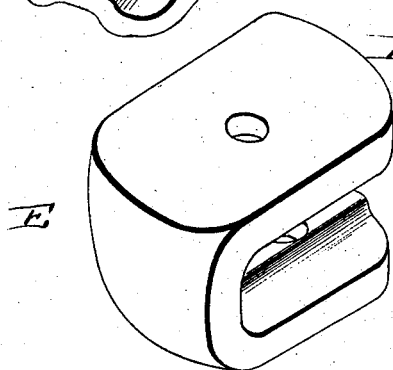
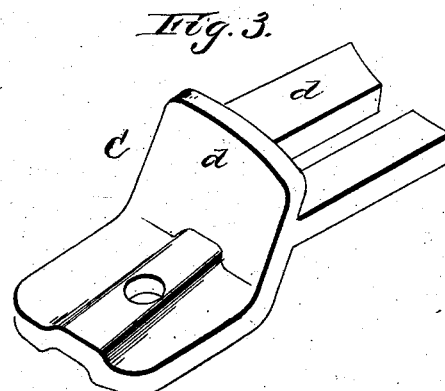
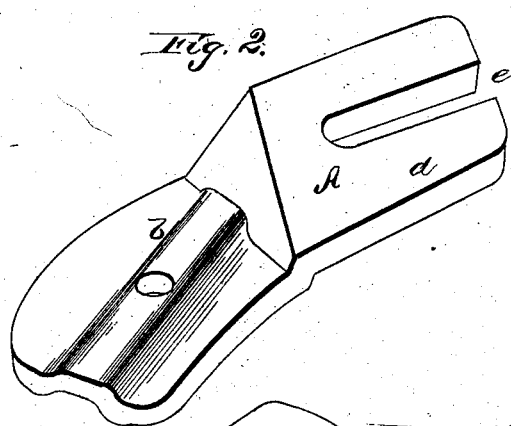
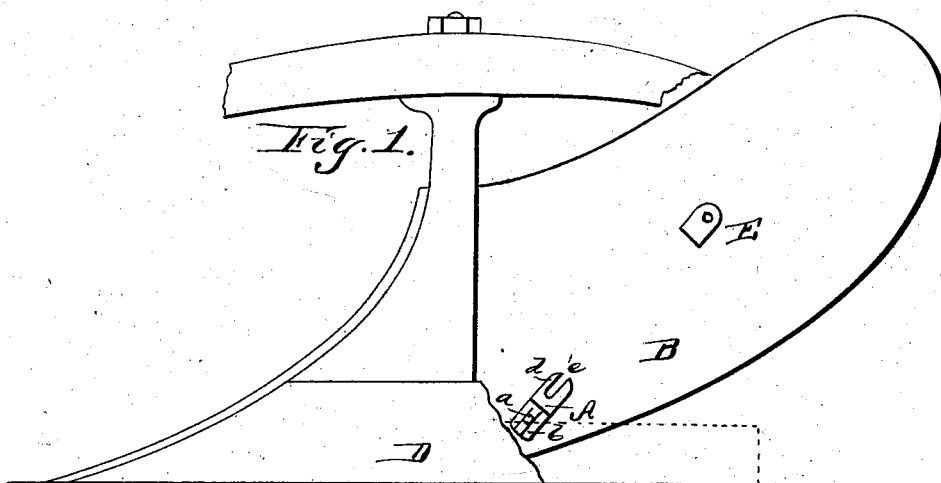


(No Model.)

T. M. BISSELL.
PLOW HANDLE.

No. 260,642.

Patented July 4, 1882.



Witnesses:
H. C. Ingraham,
W. Keyworth.

Inventor.
J. M. Bissell.
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Attorney.

UNITED STATES PATENT OFFICE.

THELUS M. BISSELL, OF SOUTH BEND, INDIANA.

PLOW-HANDLE.

SPECIFICATION forming part of Letters Patent No. 260,642, dated July 4, 1882.

Application filed April 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, THELUS M. BISSELL, of South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Mode of Attaching Handles to Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a land-side view of part of a turn-plow having my improved handle-brackets applied to it. Fig. 2 is an enlarged perspective view of the shoe-bracket which is designed to be bolted to the mold-board. Fig. 3 is a similar view of the shoe-bracket which is to be bolted to the landside. Fig. 4 is a U-shaped bracket which is to be bolted to the mold-board above and in rear of the shoe-bracket thereof. Fig. 5 is a section through the mold-board, its brackets, one of the plow-handles, and its bolt-fastenings. Fig. 6 is a view of the plow-handles and their bolt-fastenings.

This invention relates to novel means for attaching handles to plows; and the nature of my invention consists in permanently and rigidly securing brackets to the mold-board and landside of a plow by means of bolts which will not require to be moved when it is desired to secure to or detach the handles from the plow, said brackets being so constructed that they serve, in combination with bolts which do not pass through the mold-board or landside, to secure the handles rigidly in their places without reducing or otherwise weakening said handles, as will be hereinafter explained.

In the annexed drawings, A designates the shoe-bracket that is secured to the mold-board B by means of a bolt, *a*, which passes through the mold-board, through the grooved portion *b* of said bracket, and receives a nut on its inner end. This bolt *a*, when the bracket is once applied, need never be removed or even loosened. The grooved portion *b* of the said bracket is fitted over a boss, *c*, cast on the inner side of the mold-board, so that when the nut on bolt *a* is firmly screwed home the bracket will be rigidly held in its place. This bracket

A is also formed with an annular offset, *d*, which affords the required bearing-surface and pitch for the plow-handle to fit snugly against it, which offset is slotted longitudinally at *e* to receive the bolt *f*, that secures the lower part of the plow-handle P to the said bracket.

The bracket C is secured to the inside of the landside D, and this bracket is constructed and applied to the landside substantially as described for the bracket A, with this difference only: The slotted portion or offset *d* of bracket C is concave transversely, and at its lower terminus a shoulder or lip, *d'*, is formed, against which the lower end of the landside-handle P' abuts and has a solid bearing. When this bracket C is secured by a bolt, *g*, and a nut to the landside D, as shown, the slotted portion *d* is sufficiently far from the inner side of the landside to allow the head of the bolt *g* in the handle to pass freely behind it.

In combination with the two brackets A C I use another bracket, E, of U shape, which is secured permanently to the mold-board B by means of a bolt, *h*, and also a boss cast on the mold-board, which boss enters a groove in one of the limbs of the said bracket. The other limb or offset of this bracket E is perforated to receive a bolt, *k*, which passes through the plow-handle P and receives a nut, that secures this handle to said bracket and prevents both handles from being withdrawn from their slotted brackets A C. By the use of the slotted and grooved brackets A C the bolts which necessarily pass through the mold-board and landside need never be removed. Consequently the polished surfaces of these plates will not be broken from this cause. This of course insures an even wearing of said surfaces; otherwise any break in the surfaces—as, for instance, the sharp edge of a bolt-head—will cause the soil to eat in and wear those parts unevenly.

It will be seen that the handles can be removed from the landside and mold-board by simply loosening the nuts on the bolts which secure them to the brackets A C, and then removing the bolt which secures the handle P to the bracket E. The bracket-bolts are not loosened. Consequently their heads remain intact with respect to the polished surfaces of

their respective plates, and of which they constitute parts.

I am fully aware of the patent of Wm. S. Lawrence of May 29, 1877, and do not wish to
5 be understood as claiming any feature shown therein.

Having described my invention, I claim—

The combination, in a plow, of the angular bracket A, the slot *e*, and groove *b* therein, the
10 U-shaped bracket E, the angular bracket O for the landside, the slotted portion, the grooved

portion, and the offset *d* thereof, and plow-handles secured to said parts, substantially in the manner and for the purpose described.

In testimony that I claim the foregoing as
my own I affix my signature in presence of two
witnesses.

THELUS M. BISSELL.

Witnesses:

JAS. DU SHANE,
WILLIS A. BUGBEE.